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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/580,274	07/17/2006	Klaus Kruckenhauser	1739-0184PUS1	5889

2292 7590 04/27/2010  
BIRCH STEWART KOLASCH & BIRCH  
PO BOX 747  
FALLS CHURCH, VA 22040-0747

EXAMINER
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PAIK, SANG YEOP

ART UNIT	PAPER NUMBER
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3742

NOTIFICATION DATE	DELIVERY MODE
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04/27/2010

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/580,274	KRUCKENHAUSER ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	SANG Y. PAIK	3742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 26 January 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 9 is/are rejected.
- 7) ☒ Claim(s) 8 and 10-24 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ruckl (US 5,386,097) in view of Beyer et al (US 2003/0197909) or Klein (DE 39 23 829).

Ruckl shows the structure claimed including a laser radiation for printing on a cylinder workpiece, a hood or a carriage which covers a region of interaction between the radiation and the workpiece, an interchangeable C-shaped ring with two ends that follow the circumference of the workpiece. But, Ruckl does not show the hood with a vacuum extraction channel.

Beyer shows a hood which covers over an interaction between the radiation and the workpiece wherein a vacuum extraction channel is provided for vacuuming or extracting the interior air of the hood, and Klein also shows that it is known to provide a hood that cover the interaction between the radiation and the workpiece with a vacuum extraction channel to provide the vacuuming of the hood interior therein.

In view of Chasr or Klein, it would have been obvious to one of ordinary skill in the art to adapt Ruckl with the vacuum extraction channel that is connected with a

Art Unit: 3742

vacuum extraction line to extract the interior air of the hood to remove the debris resulting from the radiation interaction.

3. Claims 3-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ruckl in view of Beyer or Klein as applied to claims 1, 2 and 9 above, and further in view of Ulrichs (US 2003/0071423).

Ruckl in view of Beyer or Klein shows the structure claimed except for the C-shaped cover ring provided with means for reducing its free inside diameter.

Ulrichs shows that it is known in the art to provide a workpiece holding member with a lamella seal to seals off the holding member by reducing its diameter with respect to the workpiece member.

In view of Ulrichs, it would have been obvious to one of ordinary skill in the art to adapt Ruckl, as modified by Beyer or Klein, with the C-shaped ring with the means such as the lamellar seal to seals off the radiation interaction and allow the debris from the radiation interaction would more effectively vacuumed or extracted to the vacuum extraction source.

4. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ruckl in view of Beyer or Klein as applied to claims 1, 2 and 9 above, and further in view of Rinaldi (US 5,126,523).

Ruckl in view of Beyer or Klein shows the structure claimed except for the C-shaped cover ring with that is subdivided into at least two ring segments.

Rinaldi shows that it is known in the art to provide a C-shape cover ring with at least two segments that are pivotally held each other.

In view of Rinaldi, it would have been obvious to one of ordinary skill in the art to adapt Ruckl, as modified by Beyer or Klein, with the C-shaped ring with at least two segments to conveniently allow the workpiece to be held by the C-shaped ring segments which allows more flexibility to conform to the workpiece peripheral surface.

***Allowable Subject Matter***

5. Claims 8 and 10-24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims and

***Response to Arguments***

6. Applicant's arguments filed 1/26/10 have been fully considered but they are not persuasive.

The applicant argues Ruckl does not show the recited hood and that there is no suggestion to combine Ruckl with that of the applied Beyer or Klein reference, and even if combined, it would not result in the hood that covers a region of interaction between the radiation and the workpiece surface with the recited vacuum extraction channel as recited in the claim 1. This argument is not deemed persuasive since Beyer or Klein, which is in the same field of endeavor as that of Ruckl, which is in the field of utilizing laser radiation, shows a hood that meets the recited hood which covers a region between the laser radiation and the workpiece surface with a vacuum extraction means to create a vacuum inside the hood for extracting and removing of the debris through an opening of the hood.

Art Unit: 3742

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to SANG Y. PAIK whose telephone number is (571) 272-4783. The examiner can normally be reached on M-F (9:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tu Hoang can be reached on (571) 272-4780. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3742

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/SANG Y PAIK/

Primary Examiner, Art Unit 3742